

Biological Resource clearance surveys for soil sampling at test pit locations within the proposed Park Moabi Backwater in accordance with the Non-Exclusive Geological Sampling Permit P.R.C. 9283.



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The proposed backwater at Park Moabi was visited by a Reclamation biologist on the dates of June 12-13, 2014 to prepare for biological clearance surveys prior to soil sampling at 15 test pit locations which was scheduled the week of June 23. Surveys were conducted on June 17-18, 2014.

Reconnaissance

The general purpose of the reconnaissance surveys was to see where habitat was dense and bird activity was high, and to delineate avoidance areas that could be recognized without intensive biological surveys. This information was used to determine if any test pit locations would have to wait to be sampled until after September 1, following the bird breeding season.

The California Natural Diversity Database was examined to see what California sensitive species have been known to occur in the area within and adjacent to the proposed backwater. There were occurrence records for the following species:

- flannel mouth sucker (*Catostomus latipinnis*) - habitat for this species did not occur within the proposed backwater
- mountain plover (*Charadrius montanus*) - species surveyed for but not detected
- Mojave desert tortoise (*Gopherus agassizii*) - desert tortoise surveys were conducted in upland scrub communities within the proposed backwater. No individuals or tortoise sign was observed.
- Gila woodpecker (*Melanerpes uropygialis*) - species surveyed for but not detected
- Desert bighorn sheep (*Ovis Canadensis nelsoni*) - species not detected
- Yuma clapper rail (*Rallus longirostris yumanensis*) - habitat for this species did not occur within the proposed backwater.
- Arizona Bell's vireo (*Vireo bellii arizonae*) - species surveyed for but not detected.
- Razorback sucker (*Xyrauchen texanus*) - habitat for this species did not occur within the proposed backwater.
- Yellow-breasted chat (*Icteria virens*) - species detected within proposed backwater. Soil sampling will not be occurring by test pit locations where this species was located until after the breeding season.

On June 12, 2014, the Bureau of Reclamation Terrestrial Wildlife Biologist Laura Beth Sabin conducted reconnaissance surveys of the area where the test pit locations were located and the area where the excavator would be traveling (Appendix 1). Appendix 2 shows the area where the reconnaissance surveys took place. There were bird territories within the sections that contained the densest habitat including at least four yellow-breasted chat (*Icteria virens*) territories. The yellow-breasted chat is a California species of special concern. The number of bird territories

around test pit locations 6, 7, 9, 11 and 13 were high and the habitat was so dense that nests for those territories would be difficult to locate and buffer.

Species of birds observed during the general reconnaissance surveys were the Abert's towhee (*Pipilo aberti*), black-tailed gnatcatcher (*Poliophtila melanura*), Gambel's quail (*Callipepla gambelii*), great-tailed grackle (*Quiscalus mexicanus*), lesser night hawk (*Chordeiles gundlachii*), mourning dove (*Zenaida macroura*), northern mockingbird (*Mimus polyglottos*), red-winged blackbird (*Agelaius phoeniceus*), verdin (*Auriparus flaviceps*), white-winged dove (*Zenaida asiatica*), and yellow-breasted chat. The number of individuals per species was not tallied because they could not be accurately counted during general reconnaissance surveys.

On June 13, 2014 according to the terms of the permit, all upland scrub communities within the proposed backwater were marked with flagging and GPS data was taken of the boundaries of each upland scrub patch. The data was uploaded into GIS software. Five upland patches were flagged and marked.

Based upon this information, the Biologist provided the following recommendations to the Reclamation project manager, which were then incorporated into the project design:

1. Soil sampling at test pit locations 6, 7, 9, 11 and 13 will not be conducted until after September 1 when the bird breeding season is over to ensure Reclamation is in compliance with the Migratory Bird Treaty Act and the terms of the California State Lands Commission Non-Exclusive Geological Sampling permit.
2. When conducting the soil sampling the excavators will avoid the five flagged upland scrub habitat patches. Species of plants present within the upland scrub patches were the blue palo verde (*Parkinsonia florida*), white bursage (*Ambrosia dumosa*), creosote (*Larrea tridentate*), honey mesquite (*Prosopis glandulosa*), and beaver tail cactus (*Opuntia basilaris*). Areas of bare desert concrete and sandy dunes were present within the proposed backwater.

Biological Surveys

On June 17, 2014, a bird survey was conducted within the areas of the proposed backwater that would be impacted by the soil sampling scheduled to begin the week of June 23, 2014. Appendix 2 shows the impact area where bird surveys were conducted on June 17. The impact area did not include the areas around test pit locations 6, 7, 9, 11 and 13 which were excluded from soil sampling until after September 1, 2014 following positive nesting observations during the reconnaissance surveys. The standard MSCP bird survey protocol was followed (Bart et al. 2010; GBBO 2013). Surveys started at sunrise and ended no later than 10:00 AM. The surveyor walked within 50 m of every point within the impact area. Birds detected were recorded along with any breeding evidence.

Birds detected within the impact area were the Abert's towhee (*Pipilo aberti*), lesser night hawk (*Chordeiles gundlachii*), mourning dove (*Zenaida macroura*), white-winged dove (*Zenaida asiatica*) and black-tailed gnatcatcher (*Polioptila melanura*) (Table 1). The majority of birds were within family groups or were simply flying over the habitat. There were no signs of active nests. The habitat in the impact area was sparse enough that active nests would have been fairly easy to detect.

Table 1. Bird species that were detected within the soil sampling impact area, June 17.

Species	Number of individuals	Breeding evidence detected	Strong evidence of active nests within 200 ft (60 m) of test pits	Comments
Abert's towhee	4 (one pair had two fledged young)	Family group	No	One family group was detected near test pit 5.
black-tailed gnatcatcher	8 to 11	Family group, singing males, independent juveniles	No	One family group near test pit 15 was confirmed. Two to four independent juvenile birds were detected throughout impact area. Two to three other singing males in impact area. No evidence of active nests.
lesser night hawk	2 (1 pair)	Pair	No	One pair within impact area.
mourning dove	2	None	No	Flyovers
white-winged dove	2	None	No	Flyovers

On June 18, 2014, presence/absence surveys were conducted for the Mojave Desert tortoise (*Gopherus agassizii*) within the upland scrub habitat adjacent to and within the proposed backwater. The surveys were conducted according to the United Fish and Wildlife Service 2010 desert tortoise pre-project survey protocol (USFWS 2010). Transects 10 meters apart were placed within the upland scrub habitat within the proposed backwater. One transect was placed

west of the boundary of the proposed backwater where there was some upland scrub habitat intermixed with large bluffs. All transects were parallel to the road (in accordance with the protocol for linear projects). Patches of upland habitat existed (< 0.5 ac) that were too small for transects; one hundred percent of those patches were surveyed. Transect and patch locations are shown in Appendix 2. The Biologist walked one mile per hour on the transects and looked for desert tortoises and desert tortoise sign. No desert tortoises or desert tortoise sign were detected. Surveys for burrowing owls (*Athene cunicularia*) and their burrows were conducted at the same time as the desert tortoise surveys. No burrowing owls or their burrows were detected so no further surveys were needed. In fact, few burrows for any species were detected at the site.

Native plant surveys were conducted within the impact area on June 17 and 18, 2014. Appendix 2 shows the area where native plant surveys were conducted. No native plants within the California Natural Diversity Database were detected. The plant and tree diversity within the project area was very low.

Based on the survey information no additional exclusion zones were identified. There were no signs of active nests or burrows. Since there were family groups and other birds foraging within the impact area. The recommendation to the Reclamation Project Manager was to keep the equipment running at low speeds and to minimize impact to existing vegetation as much as possible when conducting activities.

Survey input into Worker Education Briefing

Based upon the survey results, the following information was added to the worker education program to ensure no take or harassment of those species occurs during project activities:

1. Species information about yellow-breasted chat, Mojave desert tortoise, and migratory birds
2. Workers will be informed of the exclusion areas required by the Non-Exclusive Geological Sampling Permit P.R.C. 9283 and which test holes they will be able to sample in June 2014 and which will be excluded from project activities until after nesting season, September 1.

The worker education program agenda is outlined in Appendix 3.

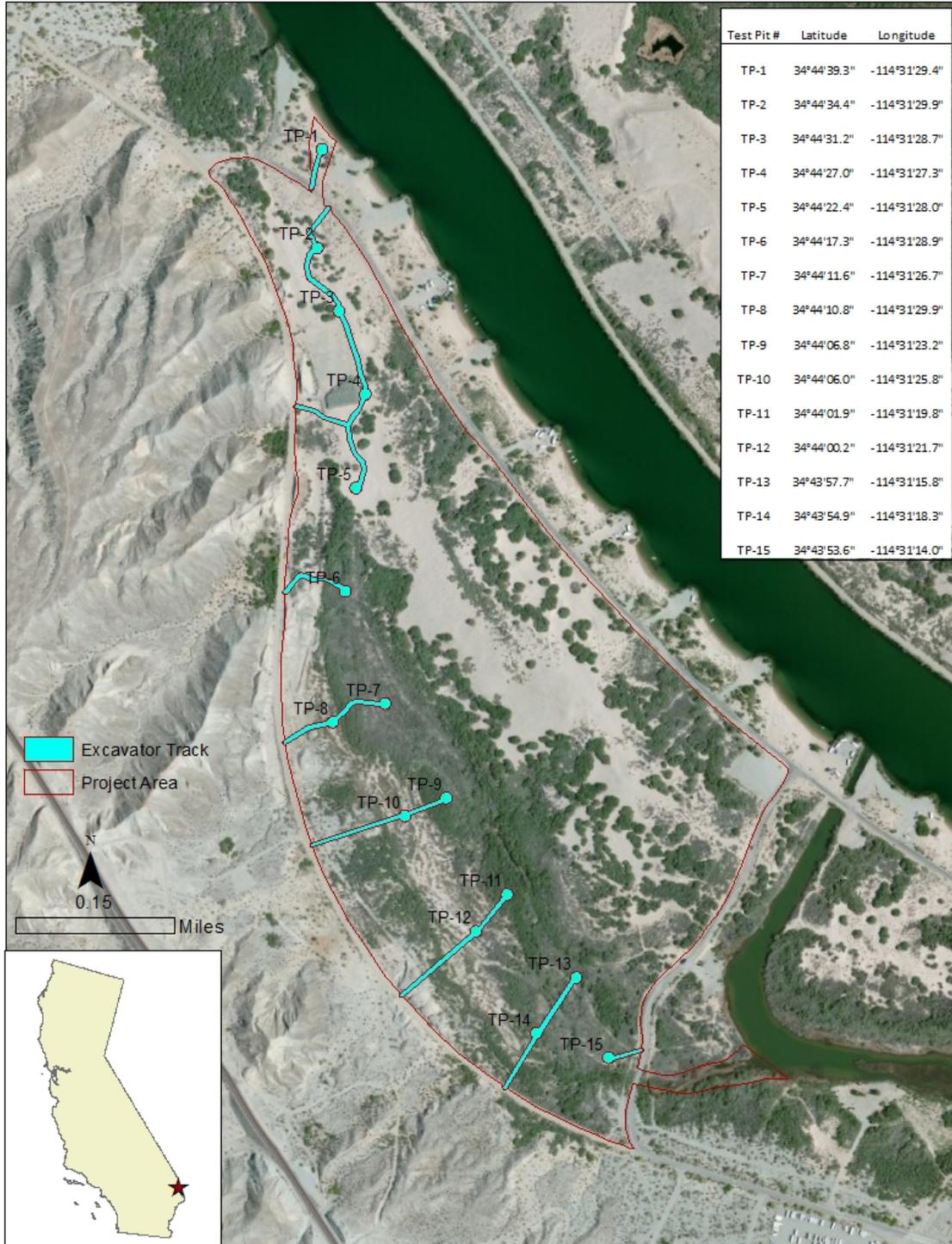
Literature Cited

Bart, Jonathan, Dunn, Leah, and Leist, Amy, 2010, A sampling plan for riparian birds of the Lower Colorado River—Final Report: U.S. Geological Survey Open-File Report 2010–1158, 20 p.

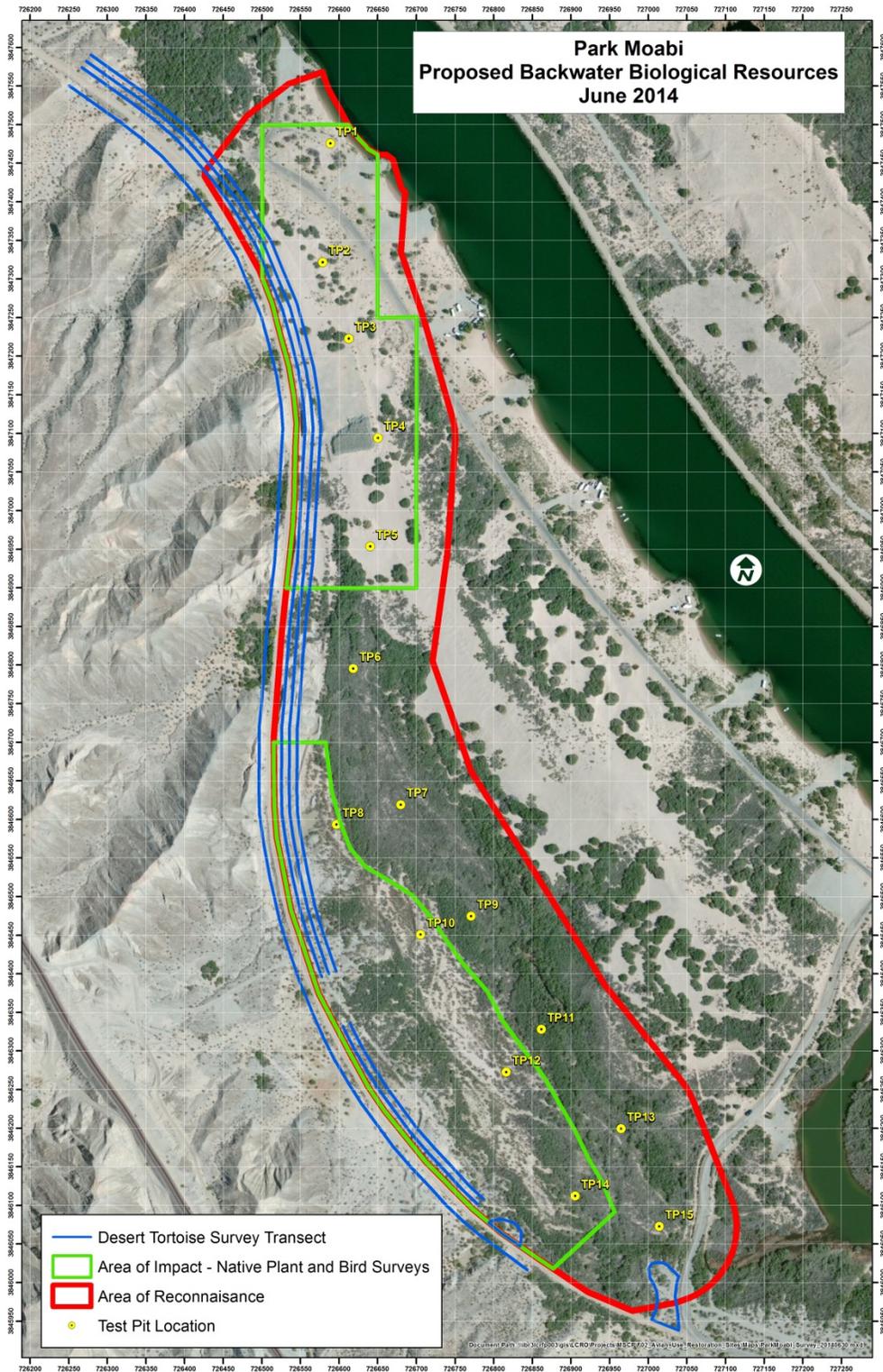
Great Basin Bird Observatory, 2013. Rapid, Intensive, and Extra-intensive Area Searches and Spot-Mapping. March 13, 2013, Great Basin Bird Observatory, Reno, NV.

United States Fish and Wildlife Service 2010. Preparing for any action that may occur within the range of the Mohave Desert Tortoise (*Gopherus agassizi*). United States Fish and Wildlife Service.

Appendix 1. Proposed test pit locations and excavator tracks within the Park Moabi Proposed backwater. Soil sampling at test pit locations 6, 7, 9, 11, and 13 will not occur until after September 1, 2014.



Appendix 2. Locations of reconnaissance (June 12 and 13) and biological surveys (June 17 and 18).



Appendix 3. Worker Education Program for workers conducting soil sampling at the proposed Park Moabi Backwater the week of June 23.

Based upon the survey results, a worker education program was conducted at the site on June 23, 2014, to ensure no take or harassment of species of concern would occur during project activities. The program was conducted by Chris Dodge, a Wildlife Biologist for the Lower Colorado River Multi-Species Conservation Program. Mr. Dodge was approved by the California Department of Fish and Wildlife to conduct this training.

Three personnel working on the project were present for the worker education program. The workers were informed of the exclusion areas required by the Non-Exclusive Geological Sampling Permit P.R.C. 9283 and which test holes they would be able to sample in June 2014 and which would be excluded from project activities until after nesting season, September 1.

The education program covered other topics such as relevant legislation which may impact the work at the site including The Federal Endangered Species Act, The Migratory Bird Treaty Act, and the California Endangered Species Act. There were questions from the workers, about the Migratory Bird Treaty Act, due to the fact that most birds occurring on the site are covered by the Act. The provisions of the Act that protect all parts of the birds including feathers and other body parts were discussed in further detail. There was specific discussion of the identification of the Yellow-breasted Chat, as it is a species covered under the California Endangered Species Act that was found breeding in parts of the site. Avoidance measures for the desert tortoise were also discussed with the workers in order to prevent any accidental injuries occurring to any desert tortoise that may be encountered at the site, although none have been detected.

Education Briefing Outline:

- Areas that are flagged where construction activity should be avoided
- Reasons for avoidance of these areas
 - o Upland habitat for protection of the desert tortoise
 - o Areas located near breeding birds of concern
- Endangered Species Act
 - o Protections and responsibilities
- Migratory Bird Treaty Act
 - o Protections and responsibilities
- California Endangered Species Act
 - o Expanded list of species from that of the ESA
 - o Bird species of concern known to occur in the area
 - Yellow-breasted Chat
- Desert Tortoise avoidance measures.